

STATE OF CALIFORNIA  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF FORESTRY

# NEWS LETTER

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KEEP CALIFORNIA GREEN AND GOLDEN



STATE OF CALIFORNIA  
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF FORESTRY NEWS LETTER

Published monthly in Sacramento for and by Division personnel. Its pages contain current facts, problems, and events relating to Forestry and to the experiences of Division personnel.

F. H. RAYMOND -

STATE FORESTER

ADMINISTRATIVE  
—DISTRICTS—

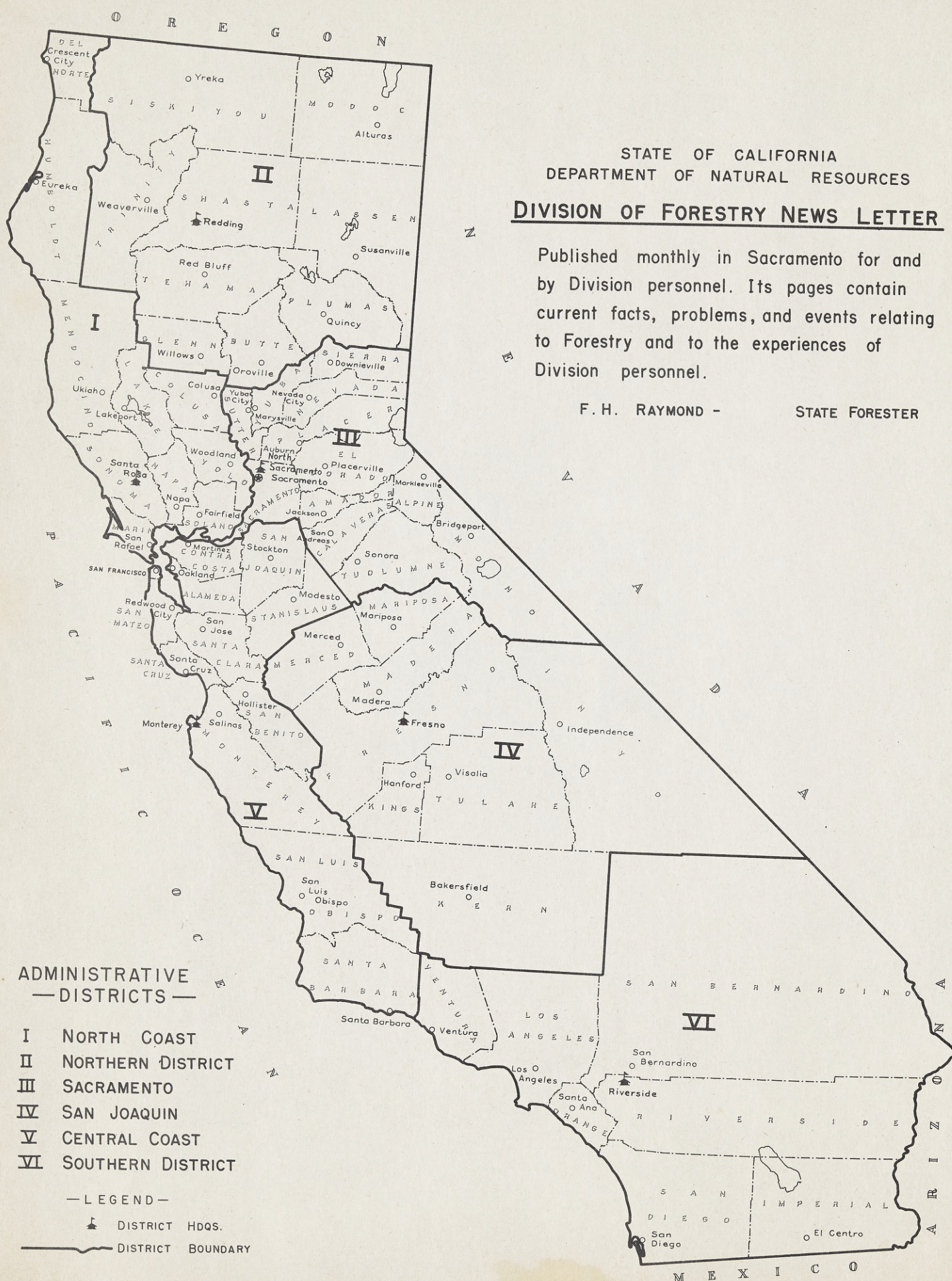
- I NORTH COAST
- II NORTHERN DISTRICT
- III SACRAMENTO
- IV SAN JOAQUIN
- V CENTRAL COAST
- VI SOUTHERN DISTRICT

—LEGEND—



DISTRICT HDQS.

— DISTRICT BOUNDARY







INTERIOR LIVE OAK



### INTERIOR LIVE OAK

Scientific Name: Quercus wislizeni (kwer-cus-wiz-luh-zeen-ee)

Common Names: Interior live oak, highland live oak, Sierra live oak; (rarely wislizenus oak).

Location: From Mt. Shasta southward down the Sierra foothills between 1000 and 3000 feet elevation. Throughout Inner Coast Range, east and south of Ukiah. In the Santa Lucia, the San Gabriel, Tehachapi Ranges and south through the Cuyamaca Mountains, into northern Mexico.

Associates: Blue oak and valley oak, digger pine, buckeye, chaparral. Along its western limits it mingles with coast live oak and even Oregon white oak (north of Tamalpais). This is a hardy tree which survives on hot, dry sites and thrives with good soil and moisture; tolerant of deep shade, but seen most often on exposed slopes.

Uses: An excellent fuel. Used for little else.

Identification: An evergreen (which makes a complete replacement of leaves in the course of two or three seasons). Trunks arise singly or severally from base, generally at an angle. Tree becomes "bushy" in youth and then branchy and spreading widely with maturity. Crowns well clothed with healthy dark green foliage. Young bark tight and rather smooth, gray-brown (darker than coast live oak). Older bark becoming furrowed and dark blue-gray or reddish brown. Sometimes bark of old trees is quite smooth. Maximum trunk diameter about 4 feet, maximum height about 50 feet, crown diameter 60 or 70 feet. (Note: large trees of this species are rare.) Leaves dark green above; lighter tone of yellow-green below. Waxy polish on both surfaces. Leaves rather leathery. Stems may be slightly hairy but not leaf surface. Leaves 1 to  $2\frac{1}{2}$  (sometimes 4) inches long; width equals about half of length. Shape sometimes roundish like coast live oak, sometimes longer and more pointed like laurel leaf. Leaf edge may be smooth, not toothed or lobed, not spiny. Part or all of a leaf edge may be slightly toothed similar to coast live oak, and may have several, or up to two dozen, tiny brown spines at end of leaf veins; however, all leaves including those with smooth edge seem to have tiny (bee stinger) prickles at the extreme end of leaf. Leaves flat or edges slightly twisted or slightly cupped either upward or downward, but general appearance of foliage is flat and not cupped. Acorns dark brown, 1 to  $1\frac{1}{2}$  inches long, about half as wide, not so elongated or pointed as coast live oak. Sheathed brown cup covers about one-half of nut.

Confused with: Coast live oak (which has cupped leaves with fuzzy under mid-rib.) Canyon live oak (which has gray or golden underleaf, whitish bark.) Valley oak (which has whitish, shreddy bark, leaf edges cut into lobes).





COAST LIVE OAK



## COAST LIVE OAK

Scientific Name: Quercus agrifolia (kwer-cus-ag-ruh-foal-ee-uh)

Common Names: Coast live oak, California live oak, encina, (rare: "holly-leaved oak").

Location: Coastal mountains and valleys from mid-Mendocino County south into Lower California. Grows only close to the ocean in northern range, but extends inward and away from the ocean below Los Angeles. Rarely into the San Joaquin and Sacramento Valleys along main river banks. On San Jacinto and Cuyamaca Mountains to 3000 feet and above. Large trees are found in southern mountains, but probably most familiar specimen grow on campuses of Stanford and University of California. This tree is much associated with early mission history and coastal settlement.

Associates: Coastal species; alder, sycamore, valley and interior live oak, redwood, and Douglas fir, madrone, tan oak, laurel. Big cone spruce and canyon live oak in Southern California.

Uses: Cut heavily for fuel at all early seaports along the coast. Poor lumber material. Prized for landscaping, especially where tree crown may spread.

Identification: An evergreen which drops and regrows its foliage throughout the year (and which may be greatly defoliated by moths in some areas). Generally one trunk rises a few feet from the ground and then branches into several trunks or large limbs. Sometimes several trunks arise from one base. Trunks usually lean away from true vertical, and soon bend one way or another. The tree crown becomes rounded and spreading until eventually its diameter exceeds the height of the tree. Trunks of old trees are rarely more than four feet in diameter; the height rarely reaches 50 feet. Old tree branches become gnarled, twisted and mossy; ideal "Sherwood Forest" movie setting. Coast live oak is very tolerant of shade, but the most majestic old trees are often found in open parks or growing singly.

Bark of young trees is smooth and bright lead-gray with appearance of being tightly stretched around the trunk. In time the bark splits into vertical shallow furrows and becomes brownish, eventually rough and plated, dark brown or blackish in color. Leaves are roundish, 1 to  $3\frac{1}{2}$  inches long (and about  $\frac{2}{3}$  as wide). Medium to dark green and somewhat polished above; yellow-green below (not gray); mid-rib and veins prominent. Some leaves are nearly flat or with edges slightly curled upward or downward, but typical mature leaves are generally spoon-shaped. (Occasionally a single tree will bear leaves all of which are curled strongly inward to the extent of forming loose cylinders). Occasional leaves have untoothed edge all around or with a few prickles, but the great majority of leaf edges are cut with shallow lobes and each lobe (i.e. each lateral vein) ends in a tiny brown spine about the size of a bee's stinger. These delicate lobes and spines reminded early explorers of European holly leaves.



Coast Live Oak

Under side of leaf nearly always supports a small growth of gray or rusty fuzz along the mid-rib. (Do not confuse with the gray or golden underleaf of canyon oak, tanoak or chinquapin). Sheathed (not warty) acorn cup is short stemmed; covers about  $\frac{1}{4}$  of the elongated and pointed acorn. Acorns  $\frac{3}{4}$  to  $2 \frac{3}{4}$  inches long,  $\frac{1}{2}$  to  $\frac{3}{4}$  inches thick; tan or dark brown when mature.

Confused with: Interior live oak which is very similar in all external characteristics. (Coast live oak leaves are generally more rounded, definitely cupped, thinner; acorns longer and more pointed). Canyon live oak which has whitish bark, gray or golden underleaf.



## AUGUST ACTIVITIES

FIRE CONTROL -- Except for an occasional day of critical fire risk, fire weather conditions throughout the month were average or below average. The northern part of the State experienced a great many lightning storms during August, and from the period July 20 to August 20 more than 300 lightning fires occurred at the higher elevations on land protected by the U. S. Forest Service. The North Coast District had 19 lightning fires and the Northern District 63.

For the period July 20 to August 20, the Division of Forestry experienced 450 fires in the watershed and forest areas burning 13,811 acres. Of these 450 fires, only 12 burned 200 acres or more. The two largest were a 5,976 acre brush and grass fire in Tuolumne County on August 11 and a 2,420 acre woodland brush and grass fire in San Diego County on August 14.

Work continued during the month on the preparation of the Fire Plan for the protection of private lands within the National Forest boundaries.

Representatives of the Division attended two indoctrination training sessions in the use of the hose-lay tray attachment for light helicopters. These meetings were presented as a part of "Helitack" which is a co-operative program of the U. S. Forest Service, State Division of Forestry, California Forest and Range Experiment Station, and Arcadia Equipment Development Center, to integrate aircraft into the fire fighting organization. Particular emphasis is being placed on developing various attachments for the small helicopter to make it an initial attack fire fighting tool. The hose lay tray now ready for field use was demonstrated before the two interagency groups on the San Bernardino and Klamath National Forests. Comparative tests were also made using manpower to lay hose over rough terrain. There appears to be considerable promise in using helicopters in many new ways in forest fire control work.

FOREST PRACTICES: The South Sierra Forest Practice Committee met in San Bernardino on August 14, 1956. The purpose of the meeting was to hear testimony from timber owners, operators, and the public in regards to proposed revision of the Forest Practice Rules of the South Sierra Forest District as they apply to Southern California conditions. The meeting was attended by over sixty people from as far south as San Diego County.

An alternate plan for the Clipper Creek Ranch was approved by the State Board of Forestry in Sacramento on August 8, 1956. This plan permits a deviation from the forest practice rules of the North Sierra Pine Forest District with respect to cutting small trees to improve forest growth.

NURSERY: At a meeting held in Sacramento on August 8, 1956, the State Board of Forestry approved prices for forest nursery stock to be sold from Division of Forestry nurseries during the 1956-57 fiscal year. Except for some reduction in prices of species becoming available in larger quantities, the prices approved by the Board were similar to last year. Prices for two-year old bare root seedlings of pines, firs, Douglas fir, cypress, cedar, and redwood ran from \$7.00 to \$12.00 per thousand trees. Potted and transplant hardwood stock for windbreak and erosion control planting are sold in smaller lots and at varying prices depending on species and class of stock.



REFORESTATION: Some 1,654 acres of state, county, and private land were planted to trees during the fiscal year 1955-56 in comparison with 1,206 acres for the previous year according to information recently gathered by the California Division of Forestry. In the 1955-56 fiscal year 549 acres were planted by the forest industries, and 482 acres were planted by private persons, clubs, and associations. On State Forests 54 acres were planted to trees. An additional 527 acres of state land were planted during the last planting season of which some 500 acres involved the replanting of the Conejos burn on the Cuyamaca Rancho State Park in San Diego County. The planting of this burn was done under the supervision of the Division using Forestry Honor Camp inmates in co-operation with the Division of Beaches and Parks.

SERVICE FORESTRY: Accomplishments in the Service Forestry program during the fiscal year 1955-56 continue to show improvement. The program provides advice and on-the-ground training for small timberland owners on marking, cruising, planting, pruning and other phases of forest management. During this period our seven service foresters received and acted on 1,264 requests for services. 776 landowners involving 95,215 acres were given advice and forest management assistance. Improved cutting practices took place on 228 ownerships. Trees on 537 acres were pruned and 471 acres were planted to trees. Some 55,000,000 board feet of timber was harvested having a stumpage value of \$535,000.00. In addition, 4,862 acres were saved from premature harvesting. The service foresters persuaded 39 owners involving 23,366 acres of timberland to avail themselves of the services of consulting foresters for more intensive assistance.

RANGE IMPROVEMENT: Range improvement personnel from Sacramento and District IV headquarters spent two and one-half days collecting field data for a range survey of Mountain Home State Forest. Data on the grazing resource will be compiled and recommendations made for maintaining the small mountain meadows in good condition since they are an important attraction to recreational use of the forest.

The Humboldt County Cattlemen's Association and the Humboldt County Forestry Committee co-operated in sponsoring a Soil-Vegetation Field Tour in the Bridgeville area on Saturday, August 25, 1956. Representatives of the Agricultural Extension Service discussed soils and vegetation at a number of locations where range improvement work is in progress. Some of the areas formerly were in timber; others are natural grasslands. In one case it is planned to reforest a former timber site on a deep forest soil that has been used as range for several years. After lunch at the new Bridgeville Fire Station of the Division of Forestry, a series of short talks discussed the Soil-Vegetation Survey and use of the information, uses of aerial photographs by ranchers, and spring vs. summer burning for range improvement.

ENGINEERING: The equipment-storage building at Bridgeville Forest Fire Station in Humboldt County has been completed and the other buildings, barracks-messhall, and residence are 90% complete.

The water system at Lassen Lodge in Tehama County has been completed.

The new map of San Bernardino County has been printed and sent to the field.

A Lake County map has also been completed and sent to the District for use this summer.



## OCTOBER ACTIVITIES

FIRE CONTROL: The largest fire of the month occurred on the second day of a two-day Santana condition in District VI. This was the 1,050 acre Barona fire six miles north of Lakeside in San Diego County.

The weather remained fairly normal for the first three weeks of the month although light showers or drizzles were experienced in some areas. During the remainder of the month two large storm fronts moved through the State bringing from a moderately heavy rain and some snow at the higher elevations in the north to scattered showers or drizzles in the south.

On October 30th the State Forester declared the fire season closed in Districts I through IV.

A major portion of the month has been spent in outlining and starting a report on the past summer's special project on cloud modification.

Following intensive use of seven "aerial tankers" (converted agricultural crop-dusting aircraft) on fires during this season, a three-day conference was held at Willows airport for evaluation purposes. This is a joint project with the California Forest and Range Experiment Station, U. S. Forest Service, and California Division of Forestry. The objective of the meeting was to review activities during the fire season, discuss operational problems and techniques, make aerial drops with chemicals from various altitudes, and prepare an operational guide for this "tool" to aid ground forces in fire control operations. The majority of those present had witnessed or taken part in operational air drops on fires this year.

Last August 1 the fleet of seven air tankers was set up on standby in the Willows, Corning, Red Bluff area for dispatch to fires in Northern California. During the month they were used on fifteen fires, six of which were California Division of Forestry. During September they were used extensively in Southern California including the McKinley fire on San Bernardino National Forest near Lake Arrowhead. In all, they operated on twenty-three fires state-wide for both the U. S. Forest Service and California Division of Forestry dropping a total of 83,120 gallons of water and 40,580 gallons of retardant chemical. Analysis by fire control men on each of these fires indicated that on fourteen of them the results were good, that on four the results were of some help, that on four of no help, and on one fire the effect was adverse. Primarily the difficulties were concerned with lack of air to ground communications and lack of co-ordination of drops with ground effort. It was felt that these problems could be remedied; however, and that the air tankers could become an operational tool next fire season.

FOREST PRACTICES: The Forest Practice Committee of the North Sierra Pine Forest District on October 17, 1956, made a field trip to the Diamond Match Company operations in the Lyman Springs-Mineral area. The committee reviewed on the ground a proposed alternate plan in which the company plans to deviate from the cutting provisions of the forest practice rules by thinning an over crowded timber stand to increase the net growth and salvage many small trees that would soon die a natural death. Timber trespass, the possibility of exempting certain species of trees from the minimum diameter and seed tree requirements of the rules, and subjects of related nature were discussed by the committee following the field trip.



STATE FORESTS: Willits Redwood Products Company was awarded the sale of some 18 million board feet of redwood and Douglas fir timber on the Jackson State Forest when sealed bids were opened in Fort Bragg on October 5, 1956. The timber will be sold at \$26.20 per thousand board feet for both species and should bring a return to the State of \$461,120. The purchaser has until November 30th of next year to harvest the timber designated for cutting on 600 acres of State Forest land.

Stream clearance work has been carried on this summer and fall on the Jackson State Forest as a pilot operation to gain a more open waterway for migratory fish spawning runs in West Chamberlain Creek.

High Sierra Pine Mills, Inc., of Oroville on October 15, 1956, was awarded a sale of sawlogs from the Forest Ranch Forest Fire Station site in Butte County. About 84,700 board feet of mixed conifer timber is being logged by Division personnel to convert a portion of the property to a demonstration forest. The sale of logs should bring some \$2,800 to the State in the form of revenue.

In co-operation with the U. S. Fish and Wildlife Service, the Division is carrying on experimental forest regeneration studies this year on the Mountain Home, Jackson, and Latour State Forests. Chemically treated tree seed is being used to test the effectiveness of WRL-3, an experimental formulation, in control of rodents on direct seeding projects. Other chemicals for rodent control are also being tried on one Forest to secure natural regeneration.

Chemical herbicides were used this fall on the Latour State Forest on an experimental basis for the control of brush for reforestation purposes. The study will be continued next spring.

INSECT CONTROL: A forest insect aerial survey was made of the Sierra Nevada mountains during the month of October by entomologists of the Division of Forest Insect Research of the California Forest and Range Experiment Station in co-operation with the Division of Forestry which furnished an observer. The results of this survey will be compiled, and field checks made by the Experiment Station before presentation to the California Forest Pest Control Action Council in November. The Council will issue a report of state-wide forest pest conditions following that meeting.

#### NOVEMBER ACTIVITIES

FIRE CONTROL: Fire weather remained unseasonably warm and dry in almost all areas of the State with District VI experiencing mild to very critical Santana conditions during most of the month. The two large fires during this period were both joint C.D.F. - U. S. Forest Service fires. The East Highlands Fire in San Bernardino burned 15,300 acres and the Inaja fire in San Diego burned 45,000 acres. One hundred thirty-five overhead and 31 fire trucks were moved into District VI for these two fires. Several other fires over 100 acres occurred in Districts IV, V, and VI.

In addition to activities associated with forest fire control, several meetings were arranged between Districts IV and V to discuss their mutual radio interference problems and design future corrective action.

The first project was to invite the Division of Communications Engineers to conduct a radio coverage survey in the Black Mountain Meadow Valley Peak area



in Fresno County. This survey was scheduled to start on November 27 and was completed by November 29. Further studies will be made on this inter-district interference problem during December.

Maps were prepared showing all U.S. Forest Service and Division of Forestry fires over 5,000 acres in size for the period 1946-1955; a map of all dams over 10,000 acre feet, and Zone 2 - 3 boundary to be used in budget hearings.

Work continued on the compilation of the report on the lightning control program and some film was edited to be used for the Northern California section of the Society of American Foresters December 1 in San Francisco and December 5 in Victoria at the Western Forestry and Conservation Association meeting.

Work also continued on the preparation of the U. S. Forest Service Fire Plan. It is now ready for the final draft.

A meeting was held on November 9 with representatives of the Legislative Auditor's office to discuss the Fire Plan and acquaint them with the various problems involved and our proposals for their solution.

A ten-day tractor test was held on the Hunter Liggett Military Reservation near King City in Monterey County. The purpose of the test was to evaluate the performance of various track laying tractors in the medium class (D-4) which had not been included in the previous tests in 1953 and 1955. The performance standards established by the two previous tests were used as a basis for comparing these tractors. In addition, certain small tractors and plows were tested to determine their application for initial attack fire control operation. Approximately 12 miles of fire break was constructed on slopes varying from level to extreme during the period. Operators were rotated among the various machines in order to make the test as equitable as possible. Twenty-three Forestry employees were involved full time on the project. Representatives from the manufacturers of the machines involved attended and participated in the test. A big job still remains to be done in evaluation of the data before final conclusions can be drawn to determine those machines which will meet the Division's requirements.

FOREST PRACTICES: Some members of the Forest Practice Committees of the North and South Sierra Pine Forest Districts met in the State Forester's office on November 7, 1956, and a joint meeting of all Forest Practice Committees was held in San Francisco on November 13th. Members of the lumber industry and the Division of Forestry participated in these meetings where a study of the Forest Practice Act, requested by these Committees and approved by the State Board of Forestry on March 22, 1956, was presented and discussed. Experiences gained in the administration of the Forest Practice Act, and the attempted prosecutions by the Attorney General's office have shown the enforcement procedures to be cumbersome and inadequate for prompt and effective legal action.

The State Board of Forestry, meeting with members of the four Forest Practice Committees and representatives of the forest industries; in San Francisco on November 15, 1956, determined that certain amendments to the Act are desirable and necessary. The Board authorized the drafting of proposed amendments for further review and introduction at the 1957 Session of the Legislature.

Two alternate plans were approved by the State Board of Forestry in San Francisco on November 16, 1956. One plan submitted by The Diamond Match



Company of Chico permits a deviation from the North Sierra Forest Practice Rules with respect to cutting crowded timber stands to increase forest growth and decrease mortality. The plan submitted by Mrs. Fay Gunby of Placerfille for her property west of Lake Tahoe within the South Sierra Pine Forest District allows the cutting of lodgepole pine below 18 inches D.B.H. when logging the stand to improve the quality of the timber stand.

INSECT AND DISEASE CONTROL: The California Forest Pest Control Action Council met in Sacramento on November 20, 1956, to review forest pest conditions in the State as revealed by detection reports, aerial surveys, and investigations. The substance of these reports and their pertinent data will be published in the annual, "Forest Pest Conditions," report and widely distributed to co-operating public and private agencies, timber owners and operators, and others.

The forest insect situation fluctuated a great deal in California during 1956. The year began with serious tree losses from bark beetles in the Central Sierra foothill region. During the summer defoliators became the main concern, but in the fall, bark beetle damage began to appear again.

The amount of damage and loss from forest diseases in 1956 was not greater than in 1955, but more extensive damage was observed this year because the survey was more thorough than ever before. Losses from dwarf mistletoe in red fir and sugar pine are more severe and extensive than previously believed. No southward extension of white pine blister rust on pine was observed, and infection conditions were not favorable for appreciable southward spread this year.

The Division was involved in seven forest insect control projects during the 1955-56 season. The total cost of the projects amounted to \$27,500 of which the state's share was \$15,417 in money and contributed labor. There were 2,143 trees treated and one project involved the spraying of 2,266 acres of state and private land. Three of these projects were contracted by agreement to the U. S. Forest Service to do the work, and involved the contribution of federal funds to the extent of 25% of the control costs on private lands. One project on federal land was done by the Division under agreement with the Federal Government using Federal funds. Control work on the three remaining projects was done by Division personnel and Forestry Honor Camp crews. Two of these projects were on private land and one on State land.

Continuance of the insect control projects for this fiscal year are planned at this time for San Jacinto, Arrowhead Crestline, and Cuyamaca Rancho State Park areas in Southern California; and the Osborne Hill Zone of Infestation in the Central Sierra. A critical situation exists in the Mill Portrero area on the Los Padres National Forest where pine engravers and flatheaded borers are killing many Jeffrey pines on several hundred acres. A field appraisal survey is to be made of this area soon for further information. Initial control action is recommended that may involve state co-operation as some private land is reportedly involved.

DEMONSTRATION FORESTS: Some 120,000 board feet of sawlogs were sold to the High Sierra Pine Mills, Inc., of Oroville from the Forest Ranch Forest Fire Station demonstration forest in Butte County for \$4,091. Local Division personnel logged this timber and received valuable training in all phases of logging, scaling, and forest management. A portion of the station site is being converted to a demonstration forest.



RANGE IMPROVEMENT: During November three plots were established on Backbone Range Study Area in Shasta County to test effects of chemical sprays in controlling brush sprouts and seedlings. Fertilizers were applied to three additional plots to determine response of the soil to various soil amendments.

The Division of Forestry experimental program in land clearing and revegetation was reviewed at the joint meeting of the State Board of Forestry and the Range Improvement Advisory Committee in San Francisco, on November 14, 1956. The major results obtained during the course of five field studies since 1948 were summarized and discussed briefly.

Range Improvement personnel from the State Forester's staff participated in a conference on "Sediment Problems in California" sponsored by the Department of Engineering, University of California. This conference, dealing mainly with downstream, harbor, and coastal phases of sedimentation, gave an interesting insight to the engineering approach to these matters.

An application of 300 pounds of fertilizer was made on plots B and D, at Spring Dell Range Study Area in San Benito County, using fixed wing aircraft.

SUMMARY OF THE DISSERTATION SUBMITTED IN PARTIAL SATISFACTION OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY OF LEVI TURNER BURCHAM

Historical Geography of the Range Livestock Industry of California

Ranching, the first industry in California, had its beginning in 1769 when Franciscan missionaries brought cattle and horses to the mission they were founding at San Diego. Long before the discovery of gold, the forage on the hills formed the basis of a reliable local economy in California.

The Spanish pioneers found a magnificent range resource. An abundance of palatable, nutritious forage, mainly from perennial plants, was admirably adapted to yearlong grazing under proper management. The total forage crop was on the order of 22.3 million animal unit months for Spanish livestock; it would have supported 1.8 million animal units of modern stock on a sustained basis.

For more than half a century California remained an outpost on the frontier of New Spain. The range livestock industry dominated the economic and social life of the entire province. The discovery of gold, occurring almost simultaneously with acquisition of California by the United States, created prodigious local markets for meat. The spectacular livestock boom of the 1850's brought high prices and overstocking of the ranges; it was terminated by devastating droughts that permanently curbed livestock raising on a speculative basis in California. This seeming disaster had beneficial aspects, fostering foundations of sound range management for an industry which today is important in the agricultural economy of the state.

Nearly two centuries of grazing have vastly altered the ranges from their pristine condition. Native perennial forage has been replaced largely by annual plants, a majority of them introduced. Replacement of native vegetation began about the time the first Spanish settlers arrived. Certain introduced annuals achieved virtual dominance over great areas of range in chronological sequence. It is highly significant that this sequence in dominance corresponds to the descending scale of annual plant successions under different intensities of range use, affording a clear indication of a secular trend toward



lower productivity.

During the last century average live weight of stock on the ranges increased about 25 per cent, placing continually greater demands on the resource because of correspondingly higher requirements for feed. While there has been no consistent trend in seasonal rainfall during the past century, there have been wide variations in this and other climatic factors from year to year which contributed to deterioration of the range.

The downward trend in productivity of our range lands has been largely reversed during the last quarter of a century. Active measures have been initiated in making an inventory of range resources, control of woody vegetation, range rehabilitation, fertilization, and grazing management. There is a growing awareness that the range is a renewable resource. Ranchers themselves are at the forefront, making a major effort to maintain and increase productivity of their range lands.

#### MEMORIAL

Most California newspapers noted the death on November 20 of Miss Esto Broughton of Modesto. She was one of the first women elected to the California Legislature. What has been long forgotten is that in her first session in 1919, Assemblywoman Broughton succeeded where bitter failure had been the rule for over thirty years. She introduced a bill embracing a fire fighting appropriation of \$25,000 for the State Board of Forestry. Before this time only a few small matching appropriations had been made specifically for protection work in the National Forests of the San Gabriel Range. Once the Governor vetoed a state-wide \$50,000 fire suppression appropriation for technical reasons. Miss Broughton (assisted by a good fire scare during the first World War) was successful and her bill was signed into law by Governor Stephens on May 22, 1919. With this fund (and Federal aid) it was possible to employ the first four State Forest Rangers.

C. R. Clar

Three range technicians of the California Division of Forestry will present papers at the annual meeting of the California Section, American Society of Range Management, being held in San Luis Obispo on December 18 and 19, 1956. R. H. Blanford, District II, will report on, "The Sprouting of Chamise After Cutting at Various Times of the Year," giving results of a study conducted on the Williams Ranch in Shasta County. L. T. Burcham, Sacramento headquarters, will discuss, "The Ecology of a Little-Known Weedy Grass of the Sierra Foothills." C. E. Carlson, District III, will explain results of a co-operative study in the use of chemicals in brush control in a paper on, "Aircraft Sprays in the Control of Chamise Sprouts," prepared jointly by himself and Dr. O. A. Leonard of the University of California at Davis.

#### ABOUT THE DIVISION

##### PERSONNEL CHANGES SINCE SEPTEMBER, 1956.

Sacramento Administration: Edward Gladish, former Trainee in District II, appointed Assistant Technician at Berkeley to work on co-operative soil-vegetation survey with the California Range and Experiment Station (University of California and C.D.F.). This was omitted from our September report of personnel changes.



Wilbur Zimdars appointed Forestry Equipment Engineer to replace Luther Gordon, who recently retired. Mr. Zimdars was formerly Automotive Maintenance Foreman in District III.

Clifford Bales, Associate Civil Engineer, has been appointed to the Sacramento staff to replace Wray Odell.

District I: George H. Ryder, former Trainee in District III, appointed Assistant Ranger in Humboldt County.

John E. Spharler promoted from Trainee to Assistant Technician and assigned to the Jackson State Forest.

Donald McCutchan appointed Trainee. He was formerly a Forest Fire Fighter Foreman in District VI.

We all regret the passing of Ranger James Glenn, Sonoma County, on October 15th. Jim had been ill for sometime.

District II: Ross Little transferred from the Division of Highways to accept the position of Automotive Maintenance Foreman in District II.

District III: George A. Dudley, former Assistant Technician in District I, appointed Forest Technician in District III to replace Harvey Striplin.

Frank Noyes and Weston Wyllie, Forest Fire Dispatchers, both reclassified to Assistant Rangers under our new program.

Don Swain, former Heavy Equipment Mechanic at the Davis Shops, appointed Automotive Maintenance Foreman in District III.

Ray Little promoted from Foreman to Trainee in District III.

Ranger Jerry Reinecker, Yuba County, has taken a leave of absence to do post-graduate study at the University of Michigan.

District IV: Carl Nicolson and Johnie Dick appointed as Trainees in District IV. Both had been Forest Fire Fighter Foremen.

District V: Robert J. Odgers, Foreman in District III, appointed Assistant Ranger in San Luis Obispo County.

District VI: Marlin B. Boucher promoted from Foreman to Assistant Ranger in Riverside County.

#### DISTRICT I

The many friends of Ranger Jim Glenn were shocked and saddened to learn of his sudden death on October 15, 1956. Jim served the Division of Forestry for over twenty-two years in various positions and locations in the state. He started in San Diego in 1934 and after a number of years in Southern California he worked for a time in the Sacramento office going from there for a short tour of duty in Auburn. In the early 40's he was assigned as State Forest Ranger in Humboldt County where he remained until he received a special assignment in District I Headquarters office in 1945. From the headquarters assignment he moved to Sonoma



County in 1947 as Ranger and spent the remaining years of his Forestry service there. Jim was an able, loyal, capable man and his loss will be felt in many ways.

#### "BUCK" ERICKSON HONORED ON RETIREMENT

St. Helena -- E. A. "Buck" Erickson's retirement as Napa County Ranger after 27 years of service with the Division of Forestry became effective July 1, but the men of the Division, their families, and state and county officials, continued to pay him homage recently at one of the liveliest and largest testimonial dinners ever held in Napa County.

More than 300 guests, including out of district representatives from as far north as Tehama County and as far south as San Diego County, jammed Bothe's Paradise Park in a tribute to the former ranger.

Erickson's administration, said to be the Division's longest record of service in one county, received a masculine-type compliment with "hearts and flowers" masked in hilarious skits written and produced by men to whom he was chief.

Entertainment during the party was planned and conducted by Forestry personnel. A series of comic pictures depicting events in "Buck's" life were flashed on a large screen and a narration of each picture was given by Associate Ranger Ray Banks. These pictures were drawn by Foreman Ray Williams of Sonoma County to whom we owe a large vote of thanks. A radio skit and stage scene was put on by a group of eight employees, namely: Ranger Fran Gowell, Technician Paul Furbush, Associates Ray Banks, Bill Miller, and Ross Dunwoody, Dispatcher Al Campbell and Foremen Wayne Malm and Angie Pedroncelli.

Former Napa County staff members, now stationed in other parts of the state, signed the guest book that was among the gifts presented to the honored guest. On the day of his retirement local crews presented their retiring chief with a handsome wristwatch. State Forester Francis Raymond left his place at the head table to preside at the serious portion of the festivities when Erickson opened packages containing a deer rifle, carrying case, saddle scabbard, and a set of steelyards in order that arguments as to who got the largest buck could readily be settled. He was also presented with a scroll, which was signed by the Director and the State Forester, making him an honorary technician. It was originally planned that Deputy State Forester Grogan would make this later presentation since he was quite instrumental in gaining "Buck's" recognition of the technician group, but since Mr. Grogan was unable to attend the party Ranger "Doc" Hufford made the presentation.

Also honored was Mrs. Erickson, whose gift from her husband's admirers and associates was a wristwatch and a large orchid corsage. Acknowledging the gifts, Erickson paid this fine tribute to his wife, Alice: "She did as much as I did to earn this marvelous occasion, cheering me and giving me courage in the early days when the 'battle line' was even closer to home than it is today."

"There just aren't words to express my appreciation of having so many friends," he said. "I want to keep them."

Erickson also stressed his gratitude for help in keeping pace with the Division's rapidly growing scope of service. "I had the good help of all the good citizens of Napa County and all the fellows that have worked for me. I don't think any county has ever had better men and loyalty over the years than



I have had. The spirit of my employees and volunteers can make a better world."

In conclusion he pledged his continued help in serving the people of Napa County. "Everyone from everywhere, my sincere thanks for this wonderful tribute!"

Rancher John Wilen of Sonoma County, on hearing an unusual sound, stepped into his front yard and greeted a helicopter pilot who had just landed. He was seeking directions to the Cooley Ranch where he was scheduled to seed a large control burn. Following a friendly cup of coffee, and a free 'copter' ride for Wilen, the pilot and his craft went on to his destination.

C. W. Fairbank, Deputy State Forester

#### MADERA COUNTY

All personnel in this Ranger Unit took a deep breath sometime during the evening of September 1st. The occasion was the more or less successful termination of the 1956 brush burning program for the purpose of range improvement in Madera County. A total of some 39 ownerships took part in the program and some 12,000 acres were treated. There were thirteen co-operative burns conducted on various Fridays, Saturdays, and Sundays starting July 7th. Several escapes were experienced, but none of a serious nature, the largest being about 50 acres in size. This may be said to be a good record in view of the heavy grass conditions resulting from favorable winter rains. A good portion of the acreages burned this year were reburns and generally good results have been experienced considering the type of vegetation and the country. More railing of brush and general preparation of areas for burning has been done. The local ranchers generally are beginning to see the value as concerns burning of brush-covered ranges.

A definite program is set up each year whereby those areas needing reburning are given priority over areas which will be burned for the first time. In this way, regrowth is not allowed to get too large for effective clean-up in preceeding burns. Two areas which were burned for the first time this year have constituted definite hazards as concerns wild fires in the past, and we now have in their stead areas with ready built bulldozer lines, trails accessible to equipment, and much less accumulations of dead brush, timber, and general trash. No one can say perhaps what the end result of this effort will be, but the reduction of hazards as described above is certainly a benefit that can be enjoyed in the immediate future.

As concerns rural fire protection in Madera County, we are anticipating delivery of a new cab over engine Ford Fabco 4-Wheel conversion fire truck with a two stage midship pump driven by power take-off. The truck will have a 20 GPM auxiliary engine driven Bean high pressure unit for grass and grain fire control work. The Fabco front end on a truck of this size will be new to us at least, and will be interesting to watch. We are now in the process of completing specifications for another new rural truck to be built sometime in the next year.

The Board of Supervisors formally approved the County budget for fire protection for the 1956-57 fiscal year on September 4. Among other things in the budget will be the operation of the Berenda Station on a 12-month basis, whereas in the past it has been operated on a 7-month (summer months) basis. Further, funds have been set-up to carry a second of the County-owned trucks being replaced on direct County maintenance and operat it with a rural Volunteer



Fire Department trained by the Division of Forestry personnel. There is presently one of these volunteer organizations at North Fork, and the new organization will be at Oakhurst. These volunteer organizations are mainly intended to help structural fire protection in the small mountain communities. Being trained and organized by Division personnel however, they will respond to all types of fires in their area. There are many benefits of this program through the fire prevention that is sold, home inspection programs set up, and general fire consciousness of the persons in the mountain communities. These volunteers are raising funds to buy equipment through giving pot luck suppers, shows and chances, and indirectly the wildland fire situation will be benefited by the lessening of incidence and better co-operation of the local people, the County, and the Division of Forestry. The local representatives of the U. S. Forest Service have also co-operated in this rural Volunteer Fire Department effort at North Fork and Oakhurst as they also stand to get considerable benefits.

G. O. Phibbs, State Forest Ranger

#### TULARE COUNTY

Some time ago we in Tulare County, conceived a seemingly good plan of assigning the News Letter detail to the various administrative personnel with each individual responsible for a particular month. Included in the plan was an automatic notification to the next in line that his turn at the task was present. Everything went along fine for several months, then something happened; we aren't sure what, but the system broke down somewhere along the line, and for the last few months nothing has shown up.

In late June and early July Tulare County retired three old obsolete pieces of fire equipment and placed in service three new fire trucks. The three new trucks are on GMC 554 chassis and the buildup was completed by P. E. Van Pelt. One truck is equipped with a 750 GPM midship pump and a 60/600 4 stage high pressure booster pump. The other two trucks are equipped with 500 GPM Chrysler Hale skid type pumps.

Bids were recently opened for two new fire truck chassis. The purchase order has been issued and we should be receiving two F-800 Ford chassis within the next few months. It is the intention to build these into 750 GPM pumpers with 60/600 4 stage high pressure booster pumps. These two trucks, when completed will replace the last Class II fire trucks remaining in the Schedule "A" portion of Tulare County.

So far this year, September 11, 1956, we have had few major fires as far as acreage or monetary loss is concerned. By number we have had 816 rural fires, and 43 Zone 1 or 2 fires to September 5. Our largest acreage occurred in July when we burned 350 acres in the Springville area. Our largest monetary loss occurred in February when a hay barn and 1,260 tons of hay were destroyed in the Tulare area with \$42,000.00 loss. Our total fire loss in Zone III to September 1 amounts to \$278,018.00 and comprises 816 runs. Of these 816 runs, 191 were of structural type and 4 of the 191 structures were of the industrial type. Our Zones 1 and 2 acreage to September 1 totals 614.6 and includes primarily grass with some brush and timber.

We have reinstituted our plan of having each of the administrative personnel responsible for separate months of the News Letter. We hope that it will work this time.

Orval Schonher, Dispatcher



## Tulare County (Cont'd.)

Some time back in the year 1946 a young fellow decided that he would join the forestry ranks for the summer only. Surely, he thought, there were other things with more opportunity and appeal that he could do at the end of summer. However, soon after becoming a fire fighter, the fires begin to pop here and there and this particular fellow, after working on a few, realized the taste and smell of smoke was, to say the least, very interesting. Not only was the work interesting, but there seemed to be great opportunity for advancement. After 4 or 5 months employment he realized that some jobs had better conditions and also paid more money than others. He more or less set his sights on becoming an Assistant State Forest Ranger. Without any doubt, this probably was one of the most painless jobs forestry had to offer. His outlook on an Assistant State Forest Ranger's job at that time was this:

1. Rides around in a pickup and issues burning permits.
2. Stands at the bottom of the mountain and says to his foreman, "the fire is up there! If you need anything, send a man down and let me know."
3. Corrects pay vouchers and fire reports.
4. Assigns days off.
5. Besides, he had an expense account.

Of course, there were some duties which would get your hands dirty, such as; reaching behind the fan of the trucks to see if the motor was clean, and above window door casings to see if they were dusty. These, however, were minor inconveniences which could be put up with. There wasn't any doubt about it -- he wanted to be an Assistant State Forest Ranger.

Time passed on slowly during the next few years. He was a foreman sure, but promotions were slowing down, examinations becoming tougher. Not only that, but all these new-fangled ideas. Foreman issuing fire permits, making out day-off schedules, being a fire boss, keeping all those reports, even making out sub-purchase orders. Boy, an Assistant Ranger didn't have anything to do any more.

Gradually the passing of years became faster. Lake, Humboldt, and Shasta Counties were memories. The new-fangled ideas were beginning to sink in. A hitch as a Trainee helped to a great extent. Another promotion to Project Foreman, but he was impatient, when was that gravy train job coming? Finally, on the 1st day of July, 1956, that grand day came. He had been promoted to Assistant State Forest Ranger in Tulare County. That soft, luxurious job was his.

This particular fellow has been an Assistant Ranger for three months now, and in all sincerity is very happy with his new position. However, he feels that the old saying, "believe nothing you hear and only half of what you see," still holds true.

Harold J. (Jim) Stanley  
Assistant State Forest Ranger



NOTE

DISTRICT IV HEADQUARTERS

The prompt and effective law enforcement action taken by Assistant Ranger Cy Holmes of Tulare County on September 12 should serve notice to careless railroad employees that "Crime Does Not Pay." Holmes observed the Southern Pacific conductor throw a lighted railroad fusee from the caboose of a freight train near Tipton, California, September 12. Holmes immediately contacted the railroad dispatcher and requested that the train be stopped at Tulare. The train was stopped, the responsible person identified, and a citation issued. The employee pleaded guilty in the local Justice Court.

Pictures of the fire started by this fusee were taken the following morning which definitely established the relationship of the fusee as the origin and cause of the fire and the relationship to the Southern Pacific tracks. These Polaroid pictures were submitted as evidence of the case handled personally by the Tulare County District Attorney. Upon hearing from the Pixley Judicial Court before Judge O. W. Bryant, the defendant pleaded guilty and was fined \$500.00. \$400.00 was suspended on the conditions that the Defendant does not repeat any careless or negligent acts while disposing of signal fusees and that the Defendant personally pay the fine within 48 hours without assistance from his employer, Union, or friends.

Surely prompt aggressive law enforcement action in similar cases should help to reduce the number of railroad fires caused by the careless discarding of fusees.

C. E. Metcalf  
Deputy State Forester

Practices A-7 and B-10 in the Agricultural Conservation Program, have received considerable impetus in the South Sierras during the past few months. The opportunity afforded the Forest Technician in working with the landowners in securing approval of work for the incentive payments, has paid off in several ways. In discussing the good forest practices of planting, pruning, thinning, and land clearing for timber purposes, we have been able to eliminate the cutting of some of the smaller diameter trees, which in ten years will double in board foot volume. Also, since the incentive for good forestry practices will be greater in cash return than that which can be gotten on range improvement practices, we feel that some of the marginal timberland, which has, in the past, been clearcut for grazing purposes, may be retained in timber. However, because of lack of definite survival data on plantings in the pure pine type in this area, it has been necessary to recommend only small acreage be approved under the A-7 program. We are working with several landowners this fall and winter in the experimental planting of areas, so that when definite results are obtained, it will be possible to know what to recommend under various planting conditions. This is particularly true where the landowner wants to grow fir at low elevations under artificial shade and irrigation.

C. E. Metcalf, Deputy State Forester

We quote below a letter of appreciation from Brigadier General Eubank for our assistance on a plane wreck recently:



"Director  
California State Division of Forestry  
Sacramento, California

"Dear Sir:

"I wish to express my sincere appreciation for the helpful assistance rendered by Mr. George Phibbs of the Madera County and California State Forestry Department, who assisted during the emergency following our recent aircraft accident. Mr. Phibbs responded with his equipment and worked tirelessly throughout the afternoon and night to extinguish fires and confine the blaze to a minimum area. He also assisted by providing radio communications to his base unit.

"It is indeed gratifying to know that such wholehearted co-operation is available to us as neighbors and members of the local community.

"Please extend my thanks and appreciation to the members of the State Forestry Department, Madera County Division, who responded so promptly during this emergency.

Sincerely,  
\* / William E. Eubank, Jr.  
Brigadier General, USAF  
Commander"

C. E. Metcalf, Deputy State Forester

#### Kings County

Assistant Ranger Stephens has returned from vacation on August 31st and said fishing at the coast was swell. Vacationing at Yellowstone National Park is Associate Ranger Lindley and is no doubt enjoying a new trailer house.

Several injuries were recorded among personnel this month. Driver Elwood Kemble at the Guernsey Station is nursing his right arm as a result of a bite from his pet monkey (Boo), while repairing the cage for the Kings County Fair display. Tendon damage necessitated surgery and his arm is supporting a cast. Cloys Mathews was using a double bitted axe to trim some tree limbs and the axe fell short hitting the lower part of his foot.

The new Mercury sedan for the Associate Ranger is in the garage waiting for the tire replacements.

C. E. Lindley  
Associate State Forest Ranger

Those of us who have had our vacations feel a nostalgia creeping - quite a number of our personnel selected the Fall in order to go deer hunting. Associate Ranger and Mrs. Lindley are looking for a live one in Modoc County. Everyone is optimistic. The fire station cooks are trading wild game recipes.

The social season is on. Volunteer groups and station crews have started a series of dinners from fish fry to pot luck. Both Rangers Lindley and Stephens attend these functions. The food is always good and the comradeship excellent.



I am happy to report our two drivers who suffered injuries on the job last month have returned to their duties.

We are continuing our efforts on behalf of selling fire prevention. This is being accomplished by many means including the supply of material and information for others who are using the subject as a speaker's topic, talks, demonstrations, press copy, and pamphlets.

With cooler mornings and evening in the San Joaquin Valley, another fire hazard is presented - the oil, gas, and other types of heating equipment when improperly installed.

The Associate Ranger is now using his new auto.

N. O. Stephens  
Assistant State Forest Ranger

#### MADERA-MERCED RANGER UNIT NEWS

On September 17th at 1445 a call was received in the Madera CDF office that a B-52 Jet-Bomber had exploded and crashed 4 miles south of Madera next to Highway 99. Schedule "A" units from Madera, Berenda, Chowchilla, and Ripperdan were dispatched as were 2 Schedule "B" units from Headquarters and 2 pumpers from the Madera City Fire Department.

Upon arrival the crews found wreckage and numerous fires and many spectators spread over a mile square area. Witnesses reported the plane was seen burning while in flight and then exploded just before it hit the ground. The pilot and co-pilot were able to parachute to safety but the 5 crewmen were killed in the explosion.

Burning jet fuel was spread over a wide area and destroyed a residence, a ceramic shop, a barn, several sheds, some livestock, and miscellaneous numbers of power poles, farm equipment, tools, and 3 acres of cotton. The value of the plane was placed at \$8 million while the loss to all the other property was estimated at \$16,000. Fire crews were able to save 2 dwellings and other property valued at \$15,000. Water was supplied to the fire trucks from a Division of Highway's tanker. Two crash trucks from Castle Air Base stood by for several days in case of flare ups. Airmen were on duty at the scene for two weeks collecting all pieces of the plane and removing them to Castle for identification in order to try and determine the cause of the wreck. Investigators stated had the plane continued on for 30 seconds more that the explosion would have happened over the center of Madera.

G. L. McCarty, Dispatcher

#### TULARE COUNTY

On the first day of July, 1956, the California Division of Forestry took on the fire prevention and fire protection of several parcels of land throughout the State, which had previously been protected by the U. S. Forest Service.

One of these parcels, fully wrapped, was delivered to the Tule Assistant Ranger District in Tulare County. Approximately 35,000 acres of brush and timber were received. The new area acquired is somewhat rugged country with few



roads for access. Two landmarks, Moses and Maggie Mountains, reach up to 9,300 and 10,000 feet respectively.

A check was made with the local U. S. Forest Service Ranger's office in Springville and it was learned that in the previous five years there had been very little fire activity in the area. We breathed a little easier at this report; however, it wasn't long before we realized that "all that glitters is not gold."

During the first week of October quite a storm passed along the Sierras bringing with it lightning which made a few friendly swats at old mother earth. Then, on October 6th, Blue Ridge Lookout reported a smoke along a ridge, directly under Moses Mountain. With the assistance of Ranger Mann and Associate Rosar, the area was scouted by plane. During the trip another smoke was located, this one being just as difficult to reach as the first.

The plan of attack was organized and it was decided that one Assistant Ranger and one Fire Fighter would go to each fire. Oh, lucky me, I got one of the assignments! Upon reaching the end of the access road the first day, we found that the area was closed in with fog and clouds. Since it was rather late in the day we decided to wait until the following morning to start our journey. Five-thirty in the morning came quickly and we were on our way. The fog and clouds were still very dense, but we were determined to finish our assignment. One hundred yards from the truck we were slightly damp. In fact, we were wet! The terrain was steep, rocky, and brushy. No matter, we went on. We had to in order to catch our hard hats. All day we walked. Through this brush field, over that rock pile, down this ridge, down that ridge. No fire! Just fog all day. After a long and tiresome walk we returned to our truck.

October 8, 1956, the fog cleared and another expedition of Assistant Ranger Stanley, Foreman Caldwell, and Fire Fighter Redemer started off under full pack, headed for the elusive fire. Spirits were high despite canteens banging on their backs, handy-talkies clobbering them in the ribs, and the constant thought that if they lost their hard hats it would be a long walk. Everything went well for awhile. The sun was out and not only could we see where we were going, but we were dry. All of a sudden the situation turned from bad to worse. Assistant Stanley jumped from a rock into a rotten log causing the log to scatter and fall apart. The log was also the home of very unhappy wasps and before Fire Fighter Redemer could change his course he was engulfed with these critters who had blood in their eyes. I am not exactly sure what did happen after that. I do remember a sudden flash past me, the rattle of metal against rock, blood-curdling yells, and the crashing of brush. Finally --- quiet. Fire Fighter Redemer was no place in sight. However, Foreman Caldwell and I had little trouble following the trail which had been left by the flying Redemer. First, was the metal helmet, a shovel, a flashlight, scattered brush, and finally, in the distance, we could hear a few loud profane messages which Fire Fighter Redemer was trying to convey to the wasps.

Needless to say, it was a long and tiring trip before we found, put out, and returned from the fire, but everything after the wasp episode was anti-climax.

We, of the Tule Assistant Ranger District, feel sure that we have some of the highest and most rugged protection area in the State; however, after these few lightning fires it might be well to give it back to the U. S. Forest Service. They don't want it!

H. J. (Jim) Stanley  
Assistant State Forest Ranger



#### DISTRICT IV

District IV's field training program got off to an early start after the rains in the last part of October, only to be interrupted, as November drew to a close by fires in Southern California.

Our first major training school was organized in Fresno County and given at the Fresno County Fair Grounds under the supervision of Assistant Ranger Don Perkins, who was ably assisted by Foremen Zanetti and Overstreet from the Mid-Valley Fire District.

Twenty-two (22) schedule B foremen and truck drivers from all ranger units in the District, attended the seven-day structural fire fighting school. A review of our schedule B fires for the past fire season indicated that slightly over 20% of the man-caused zone 1 and 2 fires were either structural or vehicle fires, which certainly indicated the need for this type of training so that we may be better equipped to meet our changing fire control problems. A three-day Defensive Driving School was planned for the last part of November to be given at the Millerton Forest Fire Station in Fresno County. The school was shortened to two days, as 20 men and 7 fire trucks were out of the District assisting on the fires in San Bernardino and San Diego Counties. Advance school had originally been planned for the third day, and it would be a repeat for men who had been through the Defensive Driving program given last April in Fresno County. The Advance School is postponed now until after the first of the year.

On Tuesday, November 15, sixty-six candidates availed themselves of the opportunity to take a forest truck driver's examination which was scheduled and given at the Millerton Forest Fire Station, Friant, California.

Deane L. Bennett  
Fire Prevention Officer

The Sierra Forest has been discovered to be breeding a new species of cedar. This became evident while reviewing a recent timber sale advertisement in the Fresno Bee announcing the sale of 40 million board feet of timber on the Sierra National Forest. It was found that amongst other species advertised for sale, some 2,300,000 feet of "Income Cedar" was advertised.

Upon checking with the supervisor's office, they felt that because of the local percentage and good form, their cedar was certainly of high value. However, for obvious reasons, they hesitated to accept a bid on the "Income Cedar" species from this correspondent.

C. E. Metcalf, Deputy State Forester

#### KINGS COUNTY

Cotton reigned supreme in Kings County through October and as November draws to a close, we find their cotton harvest is approximately 95% completed. The bumper crop has been harvested in record time due to the lack of rainfall throughout the month of November. It has also created a record number of fires in the county. Due to cotton harvesting operations, we have had more cotton fires from the field to the storage yards this year than during any previous year. Primary cause for the increase in fires seems to be carelessness on the part of pickers and handlers throughout the processing. Kings County personnel



are planning their annual fall party for the first of December. We are all looking forward to the culinary arts of the many wives who are preparing the food. As in the past, this will be another potluck affair.

Assistant Ranger, N. O. Stephens and family, donned their sombreros, hopped in the family car, and headed for Old Mexico to spend Thanksgiving Week.

C. F. Lindley  
Associate State Forest Ranger

#### IN MEMORY OF DORIS YOUNG

Doris Young died on September 21, 1956, as the result of an automobile accident which occurred on September 16, 1956. Until her untimely death Doris had been an employee of the State of California for thirty-two years, of which the last nineteen years were in the employ of the Division of Forestry in the Sacramento Administration office.

Doris has always been noted for her devotion to her job, for her loyalty to her supervisors, her fellow employees, and the Division of Forestry, and for her unsolicited willingness to work long and difficult hours under physical handicap in order to perform her job with the maximum of perfection.

Doris' absence from the office is felt and she will be remembered for years to come.

#### SANTA CLARA

There are some things that never have to happen, and suffering burns during a forest fire is one of them.

As most of you know, two of the men that were burned in the recent San Bernardino forest fire are from District V. One is Assistant Forest Ranger Jim Johnson from Monterey County, and the other is Clarence "Dick" Mannhalter from Santa Clara County.

Assistant Ranger Johnson is new up this way, but an old hand in the Division. Undoubtedly Monterey will forward to us, through News Letter, more information regarding him.

Fire Fighter Mannhalter has been with us four seasons. He is an excellent fire fighter. Just took the State Civil Service Truck Driver examination, and will without doubt, be listed as a new driver in the near future. Dick's Doctor advises he is recovering very rapidly and will soon be able to return home and possibly to work. Dick anticipates making Forestry his career.

All Santa Clara County personnel join in wishing both these men a speedy recovery.

E. R. "Sam" Garza  
Forest Fire Dispatcher

#### DISTRICT VI

Whiffs from District VI. We had another rough September as many of



District II, III, and IV personnel know. Riverside City average 97 for all of September. One of the thirteen Class E fires was west of San Diego's Lake Henshaw - 7,845 acres while the most spectacular was up the 3000' rise in two miles of the San Bernardino Mountains. Just over the top was the usual target of the heavily built-up Lake Arrowhead. Except for three houses, we skirted the head to the east and then stomped her out. That adds one more big block of burned-out watershed just above and east of San Bernardino City, this last one 10,250. Some counts on fire trucks reached 150 while on dozers, 27. With five fire camps plus County Headquarters, and the conglomeration of agencies furnishing the equipment, no figures can be factual. On hose loss, 15,000 feet were lost in one blow-up.

The U. S. Forest Service used seven airplanes to drop 43,000 gallons of water-borate solution. Six of the planes were those stationed at Willows. Our observations of their work point to an expanding use of this method.

The 1956 aggregation of District Headquarters staff which headed CSEA chapters is now out of the drivers' seats. Lew Reese and Cab Brown are now just 1957 delegates instead of 1956 presidents, while Fred Cain changes from secretary to delegate. Cab's chapter changes the reins November 9th at a barbecue. Eddie Brown, Rainbow CDC Foreman, will have to miss due to illness. We wish him rapid recovery.

Boy, if the Chevrolet Factory intends to keep its lead, it better sharpen up. The list of District Headquarters ex-Ford haters now piloting Fords is getting long -- Hank Nelson, Buzz Whitlock, Rex Bassett, Ed Hewitt, and Neil Rice.

With that, we'll ring down the curtain.

Douglas Glenn  
Forest Fire Dispatcher

The staff of the News Letter wish all a Merry Merry Christmas and a Happy New Year.

#### DIVISIONAL TRAINING

A series of meetings have been held in Districts I, II, III, and V for planning the winter and spring training programs. Districts IV and VI plan to hold their meeting shortly after the first of the year.

All six districts have under way the "Defensive Driving" program. It is estimated that this program will be given in all Ranger Units and at most District Headquarters before the next fire season, and over five hundred of our employees will go through the course if present plans are fulfilled.

District I has set up plans to give Conference Leadership to all of their Assistant State Forest Rangers this year. Both the Rangers and the Associate Rangers and many of their technical people went through this course last year. This course will be conducted by Assistant Deputy State Forester Sloat and Ranger Siler.



District III will have a Conference Leadership course for Rangers scheduled to begin on January 7 at Sutter Hill. The course will be conducted by Assistant Deputy State Forester Tomblin and Training Officer Lefebvre.

A course is to be held in District V from January 28 through February 1 under the leadership of Assistant Deputy State Forester Albertus and Training Officer Lefebvre.

Similar courses for Rangers are being planned for District IV and VI during the spring.

In addition to the above, District I is planning training sessions on budgets, personnel, use of burning permits, and safety. It is possible that a District-wide program on the use of water will also be undertaken. In addition to this, rather an extensive program for training within the Ranger Units has been outlined.

District II will base their program mostly on Ranger Unit programs although a district-wide course in time keeping has been planned.

District III is setting up courses in file control, local use of fire reports, burning permits, instructor training, communications, co-ordination, aerial photography, map reading, safety, first aid, forest management, and audio visual equipment maintenance. In addition, a rather extensive school on campaign fire management is being planned for the Rangers.

The above courses are planned for various job levels, and programs will be conducted until next fire season.

Although, District IV has not yet had their planning meeting, extensive training is under way for Schedule A and Schedule B Foremen and Drivers. Basically, these courses are designed to teach each of these the fundamentals of the work being done by the other class.